openreach

SIN 506B

Issue 1.1

June 2025

Suppliers' Information Note

For The Openreach Network

Fibre to the Premises (FTTP) Generic Ethernet Access on GPON Optical Network Terminals (ONTs)

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Issued by: Matt Sledge	**Issue:** 1.1	**Date:** 30/06/2025

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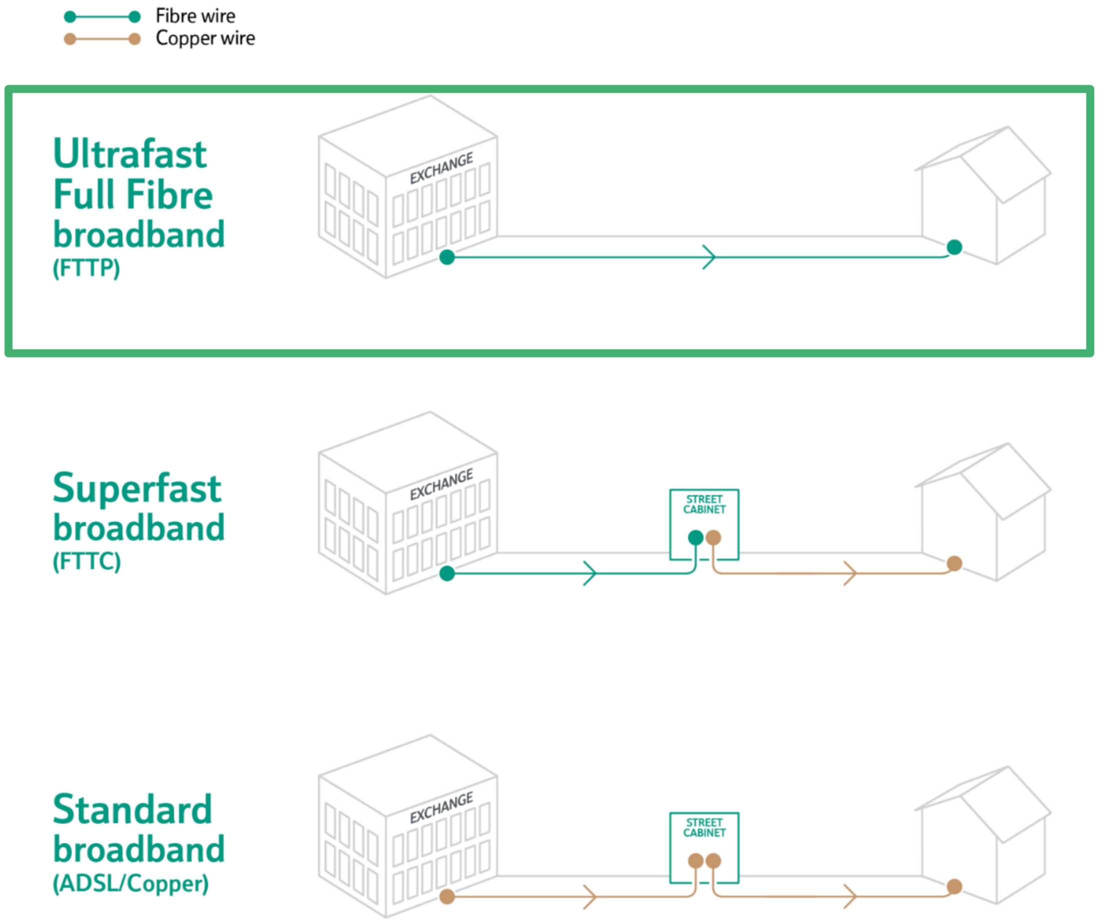
What is an ONT?

An Optical Network Terminal (ONT) is a device that connects your home or business to a fibre-optic internet network.

Unlike a modem, which connects to traditional copper phone lines, an ONT converts light signals from fibre-optic cables into digital data that your devices can use.

At Openreach, we provide the ONT to enable Communication Providers (CPs) to offer their internet services. The CP then plugs their router or gateway into the ONT, allowing the end-user to enjoy Ultrafast, reliable internet for activities like streaming videos, making video calls, and browsing the web.

Openreach utilises multiple models of ONTs from several different vendors. The specific ONT used for an installation is selected by us based on the type of service being provided. Our vendors include Huawei, Ribbon (formerly ECI), Adtran, Nokia, Sercomm, and Zyxel.


Fibre wire
Copper wire
Ultrafast Full Fibre broadband (FTTP)
EXCHANGE
Superfast broadband (FTTC)
EXCHANGE
STREET CABINET
Standard broadband (ADSL/Copper)
EXCHANGE
STREET CABINET

ONTs used for GEA FTTP

Nokia	 G-010G-Q	 G-010G-R	 G-010G-T	 G-040G-B	 G-010G-D
Adtran	 SDX611B	 SDX611D	 SDX611Q	 SDX614	 SDX601Q
Sercomm	 FG1000A				
Zyxel	 PM5313-00				

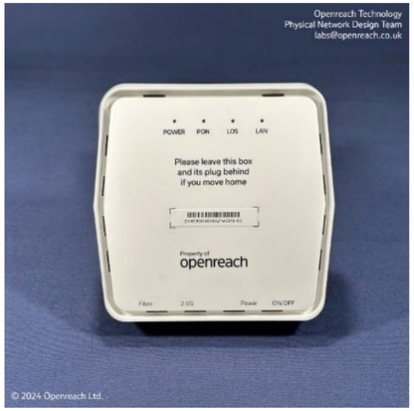
Green = Provided for new services Red = Supported but no longer provided Blue = Planned for future use

Our Legacy Vendors

Green = Provided for new services Red = Supported but no longer provided

Huawei	 HG8240	 HG8110H-20	 HG8010H5-20	 HG863		
Ribbon (formerly ECI)	 B-FOCuS O-4G2Pub/c	 B-FOCuS O-4Gs2PUb/c	 B-FOCuS O-4G2PUb/e	 B-FOCuS O-4G2Pub/g	 B-FOCuS O-4G2PCM BT	

Device	
Manufacturer	**Model**
Zyxel	PM5313-00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POWER
PON
LOS
LAN
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Property of
openreach
Fibre
2.5G
Power
ON/OFF
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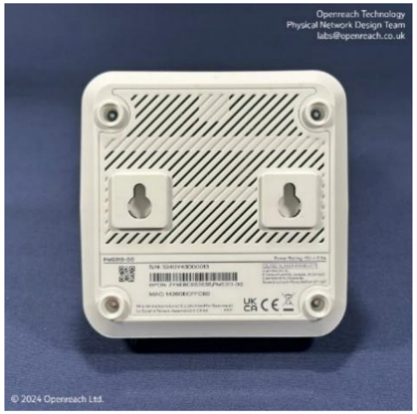
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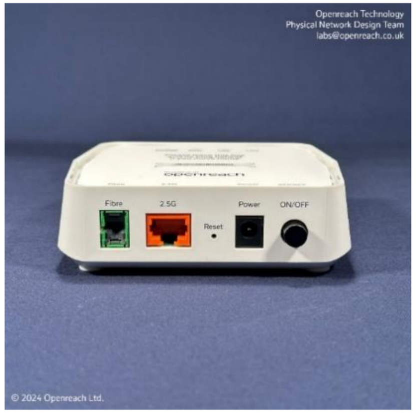
Openreach Technology
Physical Network Design Team
labs@openreach.co.uk
Fibre
2.5G
Reset
Power
ON/OFF
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Ports		
Interface	**Quantity**	**Type**
Optical	1	SC/APC
LAN	1	2.5Gb-capable RJ45 (Orange)
Power	1	5.5/2.1 IEC 60130-10 Type A Coaxial (centre +)
Battery	0	N/A

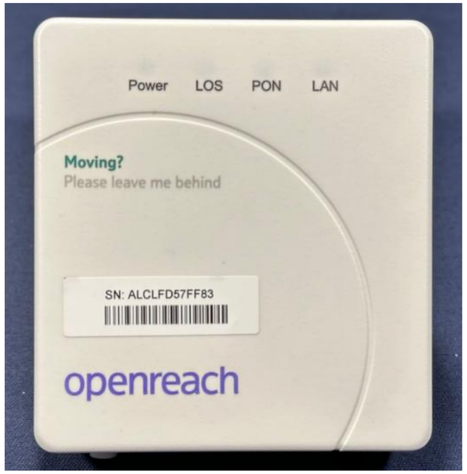
LED Behaviour				
Behaviour	**POWER**	**PON**	**LOS**	**LAN**
OFF	Power Off	No Optical Signal or Failed Auth	Optical Link Active	LAN Disconnected
FLASHING	Device Starting	Optical Signal Present and Authenticating	Firmware Update Failure	LAN Traffic Flowing
ON	Power On	Optical Link Active and Authenticated	No Optical Signal or Authentication Failed	LAN Connected

Power	
Input Voltage	12VDC
Current Rating	0.5A
Idle Power Consumption	4.6W
Max Power Consumption	5.8W
Battery Backup	Not Supplied

Physical Dimensions	
Height	108.8mm
Width	109.9mm
Depth	32mm
Screw Mount	60mm (centre-to-centre)

Notes
N/A

Device	
Manufacturer	**Model**
Nokia	G-010G-Q



Ports		
Interface	**Quantity**	**Type**
Optical	1	SC/APC
LAN	1	1Gb-capable RJ45 (Yellow)
Power	1	5.5/2.1 IEC 60130-10 Type A Coaxial (centre +)
Battery	0	N/A

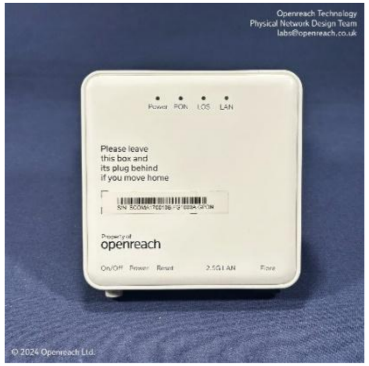
LED Behaviour				
Behaviour	**POWER**	**PON**	**LOS**	**LAN**
OFF	Power Off	No Optical Signal or Failed Auth	Optical Link Active	LAN Disconnected
FLASHING	Device Starting	Optical Signal Present and Authenticating	Firmware Update Failure	LAN Traffic Flowing
ON	Power On	Optical Link Active and Authenticated	No Optical Signal or Authentication Failed	LAN Connected

Power	
Input Voltage	12VDC
Current Rating	0.5A
Idle Power Consumption	1.8W
Max Power Consumption	4W
Battery Backup	Not Supplied

Physical Dimensions	
Height	89mm
Width	82mm
Depth	27mm
Screw Mount	60mm

Notes
N/A

Device	
Manufacturer	**Model**
Sercomm	FG1000A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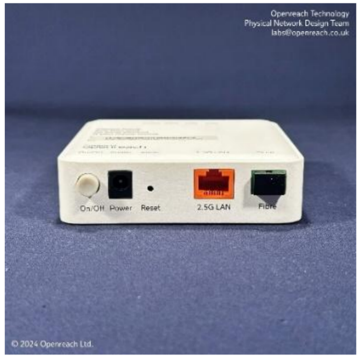
Power PON LOS LAN
Please leave this box and its plug behind if you move home
openreach
On/Off Power Reset 2.5G LAN Fibre
© 2024 Openreach Ltd.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Ports		
Interface	**Quantity**	**Type**
Optical	1	SC/APC
LAN	1	2.5Gb-capable RJ45 (Orange)
Power	1	5.5/2.1 IEC 60130-10 Type A Coaxial (centre +)
Battery	0	N/A

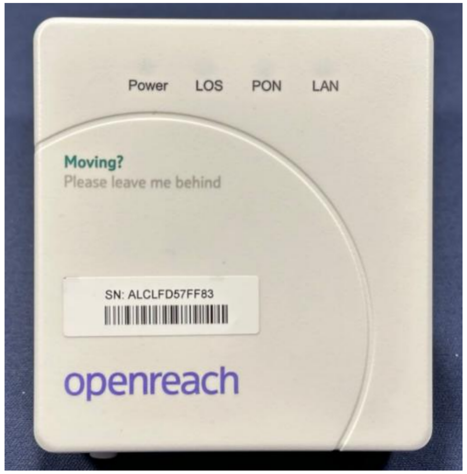
LED Behaviour				
Behaviour	**POWER**	**PON**	**LOS**	**LAN**
OFF	Power Off	No Optical Signal or Failed Auth	Optical Link Active	LAN Disconnected
FLASHING	Device Starting	Optical Signal Present and Authenticating	Firmware Update Failure	LAN Traffic Flowing
ON	Power On	Optical Link Active and Authenticated	No Optical Signal or Authentication Failed	LAN Connected

Power	
Input Voltage	12VDC
Current Rating	1.0A
Idle Power Consumption	Not yet tested
Max Power Consumption	Not yet tested
Battery Backup	Not Supplied

Physical Dimensions	
Height	97mm
Width	97mm
Depth	27.5mm
Screw Mount	60mm

Notes
N/A

Device	
Manufacturer	**Model**
Nokia	G-010G-R



Ports		
Interface	**Quantity**	**Type**
Optical	1	SC/APC
LAN	1	1Gb-capable RJ45 (Yellow)
Power	1	5.5/2.1 IEC 60130-10 Type A Coaxial (centre +)
Battery	0	N/A

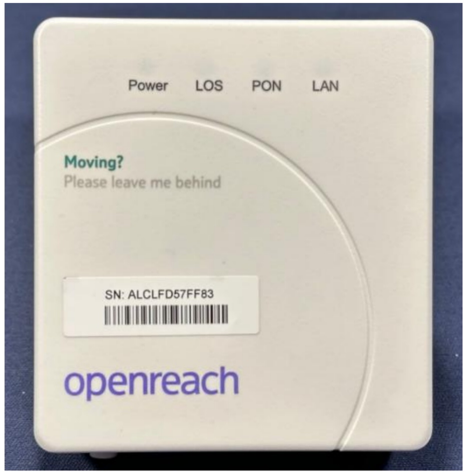
LED Behaviour				
Behaviour	**POWER**	**PON**	**LOS**	**LAN**
OFF	Power Off	No Optical Signal or Failed Auth	Optical Link Active	LAN Disconnected
FLASHING	Device Starting	Optical Signal Present and Authenticating	Firmware Update Failure	LAN Traffic Flowing
ON	Power On	Optical Link Active and Authenticated	No Optical Signal or Authentication Failed	LAN Connected

Power	
Input Voltage	12VDC
Current Rating	0.5A
Idle Power Consumption	2W
Max Power Consumption	4W
Battery Backup	Not Supplied

Physical Dimensions	
Height	89mm
Width	82mm
Depth	27mm
Screw Mount	60mm

Notes
N/A

Device	
Manufacturer	**Model**
Nokia	G-010G-T



Ports		
Interface	**Quantity**	**Type**
Optical	1	SC/APC
LAN	1	2.5Gb-capable RJ45 (Orange)
Power	1	5.5/2.1 IEC 60130-10 Type A Coaxial (centre +)
Battery	0	N/A

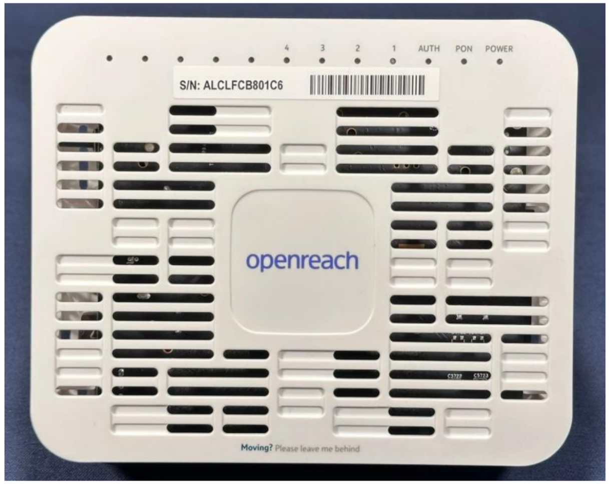
LED Behaviour				
Behaviour	**POWER**	**PON**	**LOS**	**LAN**
OFF	Power Off	No Optical Signal or Failed Auth	Optical Link Active	LAN Disconnected
FLASHING	Device Starting	Optical Signal Present and Authenticating	Firmware Update Failure	LAN Traffic Flowing
ON	Power On	Optical Link Active and Authenticated	No Optical Signal or Authentication Failed	LAN Connected

Power	
Input Voltage	12VDC
Current Rating	0.5A
Idle Power Consumption	1.8W
Max Power Consumption	4W
Battery Backup	Not Supplied

Physical Dimensions	
Height	89mm
Width	82mm
Depth	27mm
Screw Mount	60mm

Notes
N/A

Device	
Manufacturer	**Model**
Nokia	G-040G-B



Ports		
Interface	**Quantity**	**Type**
Optical	1	SC/APC (on rear)
LAN	4	1Gb-capable RJ45 (Yellow)
Power	1	5.5/2.1 IEC 60130-10 Type A Coaxial (centre +)
Battery	0	N/A

LED Behaviour				
Behaviour	**POWER**	**PON**	**LOS**	**LAN**
OFF	Power Off	No Optical Signal or Failed Auth	Optical Link Active	LAN Disconnected
FLASHING	Device Starting	Optical Signal Present and Authenticating	Firmware Update Failure	LAN Traffic Flowing
ON	Power On	Optical Link Active and Authenticated	No Optical Signal or Authentication Failed	LAN Connected

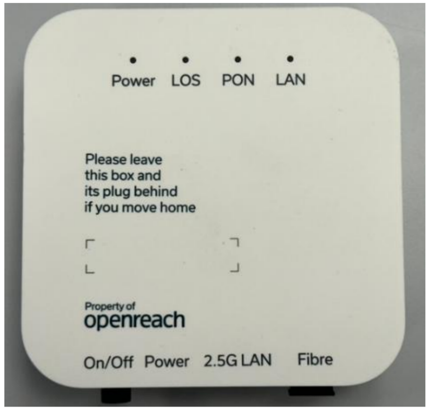
Power	
Input Voltage	12VDC
Current Rating	1A
Idle Power Consumption	2.5W
Max Power Consumption	10W
Battery Backup	Not Supplied

Physical Dimensions	
Height	135mm
Width	111mm
Depth	37.5mm
Screw Mount	83mm

Notes
N/A

Device

Manufacturer	Model
Nokia	G-010G-D


Power
LOS
PON
LAN
Please leave this box and its plug behind if you move home
Property of openreach
On/Off
Power
2.5G LAN
Fibre

Ports

Interface	Quantity	Type
Optical	1	SC/APC
LAN	1	2.5Gb-capable RJ45 (Orange)
Power	1	5.5/2.1 IEC 60130-10 Type A Coaxial (centre +)
Battery	0	N/A

LED Behaviour

Behaviour	POWER	PON	LOS	LAN
OFF	Power Off	No Optical Signal or Failed Auth	Optical Link Active	LAN Disconnected
FLASHING	Device Starting	Optical Signal Present and Authenticating	Firmware Update Failure	LAN Traffic Flowing
ON	Power On	Optical Link Active and Authenticated	No Optical Signal or Authentication Failed	LAN Connected

Power

Input Voltage	12VDC
Current Rating	0.5A
Idle Power Consumption	Not yet tested
Max Power Consumption	4.3W
Battery Backup	Not Supplied

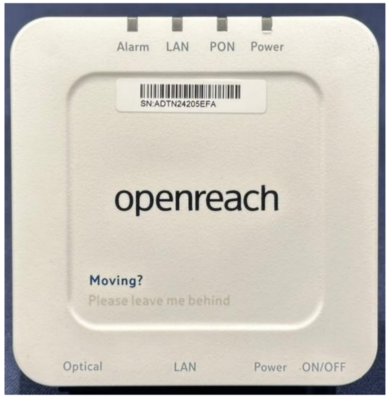
Physical Dimensions

Height	100mm
Width	100mm
Depth	30mm
Screw Mount	60mm

Notes

N/A

Device	
Manufacturer	**Model**
Adtran	SDX611B


Alarm
LAN
PON
Power
SN:ADTN24205EFA
openreach
Moving?
Please leave me behind
Optical
LAN
Power
ON/OFF

Ports		
Interface	**Quantity**	**Type**
Optical	1	SC/APC
LAN	1	1Gb-capable RJ45 (Yellow)
Power	1	5.5/2.1 IEC 60130-10 Type A Coaxial (centre +)
Battery	0	N/A

LED Behaviour				
Behaviour	**POWER**	**PON**	**LOS**	**LAN**
OFF	Power Off	No Optical Signal or Failed Auth	Optical Link Active	LAN Disconnected
FLASHING	Device Starting	Optical Signal Present and Authenticating	Firmware Update Failure	LAN Traffic Flowing
ON	Power On	Optical Link Active and Authenticated	No Optical Signal or Authentication Failed	LAN Connected

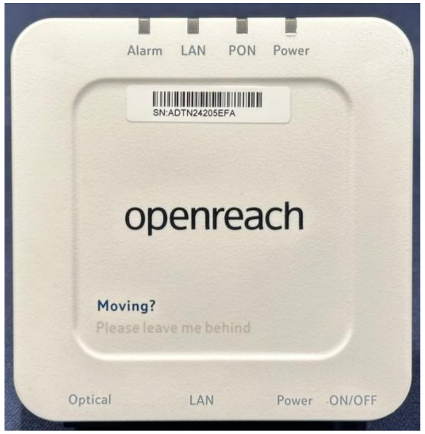
Power	
Input Voltage	12VDC
Current Rating	0.5A
Idle Power Consumption	2.1W
Max Power Consumption	4W
Battery Backup	Not Supplied

Physical Dimensions	
Height	80mm
Width	80mm
Depth	24mm
Screw Mount	50mm

Notes
N/A

Device

Manufacturer	Model
Adtran	SDX611D


Alarm
LAN
PON
Power
SN:ADTN24205EFA
openreach
Moving?
Please leave me behind
Optical
LAN
Power
ON/OFF

Ports

Interface	Quantity	Type
Optical	1	SC/APC
LAN	1	1Gb-capable RJ45 (Yellow)
Power	1	5.5/2.1 IEC 60130-10 Type A Coaxial (centre +)
Battery	0	N/A

LED Behaviour

Behaviour	POWER	PON	LOS	LAN
OFF	Power Off	No Optical Signal or Failed Auth	Optical Link Active	LAN Disconnected
FLASHING	Device Starting	Optical Signal Present and Authenticating	Firmware Update Failure	LAN Traffic Flowing
ON	Power On	Optical Link Active and Authenticated	No Optical Signal or Authentication Failed	LAN Connected

Power

Input Voltage	12VDC
Current Rating	0.5A
Idle Power Consumption	2.1W
Max Power Consumption	4W
Battery Backup	Not Supplied

Physical Dimensions

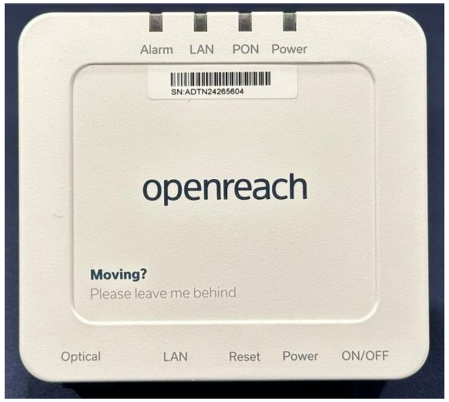
Height	80mm
Width	80mm
Depth	24mm
Screw Mount	50mm

Notes

N/A

Device

Manufacturer	Model
Adtran	SDX611Q


Alarm
LAN
PON
Power
SN:ADTN24265604
openreach
Moving?
Please leave me behind
Optical
LAN
Reset
Power
ON/OFF

Ports

Interface	Quantity	Type
Optical	1	SC/APC
LAN	1	2.5Gb-capable RJ45 (Black)
Power	1	5.5/2.1 IEC 60130-10 Type A Coaxial (centre +)
Battery	0	N/A

LED Behaviour

Behaviour	POWER	PON	LOS	LAN
OFF	Power Off	No Optical Signal or Failed Auth	Optical Link Active	LAN Disconnected
FLASHING	Device Starting	Optical Signal Present and Authenticating	Firmware Update Failure	LAN Traffic Flowing
ON	Power On	Optical Link Active and Authenticated	No Optical Signal or Authentication Failed	LAN Connected

Power

Input Voltage	12VDC
Current Rating	0.5A
Idle Power Consumption	2.3W
Max Power Consumption	4W
Battery Backup	Not Supplied

Physical Dimensions

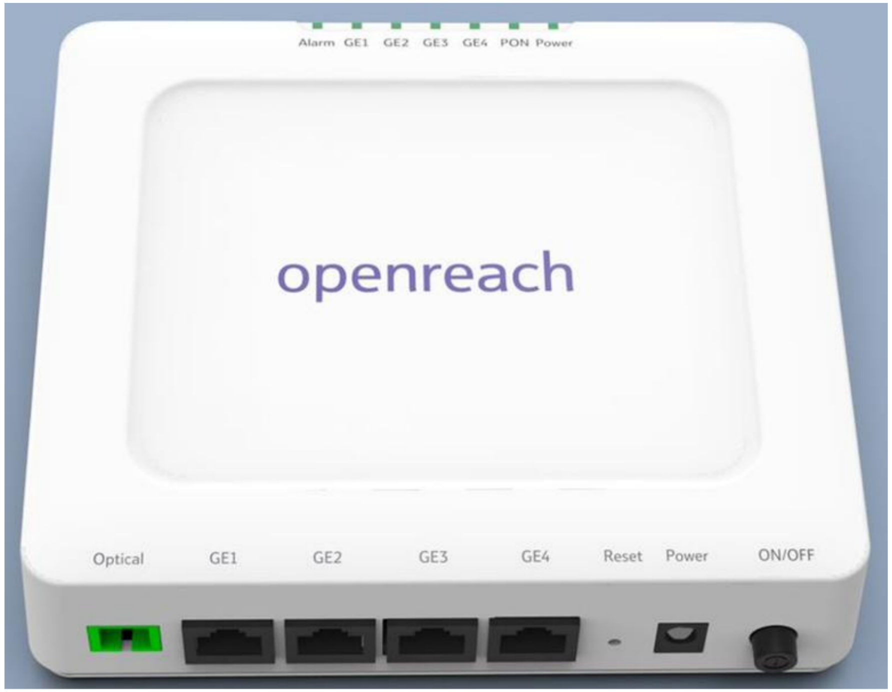
Height	80mm
Width	90mm
Depth	35mm
Screw Mount	50mm

Notes

N/A

Device

Manufacturer	Model
Adtran	SDX614



Ports

Interface	Quantity	Type
Optical	1	SC/APC
LAN	4	1Gb-capable RJ45 (Black)
Power	1	5.5/2.1 IEC 60130-10 Type A Coaxial (centre +)
Battery	0	N/A

LED Behaviour

Behaviour	POWER	PON	LOS	LAN
OFF	Power Off	No Optical Signal or Failed Auth	Optical Link Active	LAN Disconnected
FLASHING	Device Starting	Optical Signal Present and Authenticating	Firmware Update Failure	LAN Traffic Flowing
ON	Power On	Optical Link Active and Authenticated	No Optical Signal or Authentication Failed	LAN Connected

Power

Input Voltage	12VDC
Current Rating	0.5A
Idle Power Consumption	2.3W
Max Power Consumption	4W
Battery Backup	Not Supplied

Physical Dimensions

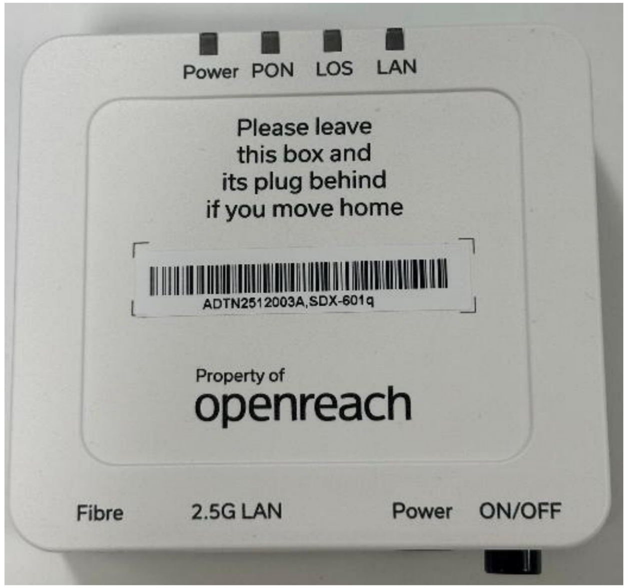
Height	80mm
Width	90mm
Depth	35mm
Screw Mount	50mm

Notes

N/A

Device

Manufacturer	Model
Adtran	SDX601Q


Power
PON
LOS
LAN
Please leave this box and its plug behind if you move home
ADTN2512003A,SDX-601q
Property of
openreach
Fibre
2.5G LAN
Power
ON/OFF

Ports

Interface	Quantity	Type
Optical	1	SC/APC
LAN	1	2.5Gb-capable RJ45 (Orange)
Power	1	5.5/2.1 IEC 60130-10 Type A Coaxial (centre +)
Battery	0	N/A

LED Behaviour

Behaviour	POWER	PON	LOS	LAN
OFF	Power Off	No Optical Signal or Failed Auth	Optical Link Active	LAN Disconnected
FLASHING	Device Starting	Optical Signal Present and Authenticating	Firmware Update Failure	LAN Traffic Flowing
ON	Power On	Optical Link Active and Authenticated	No Optical Signal or Authentication Failed	LAN Connected

Power

Input Voltage	12VDC
Current Rating	0.5A
Idle Power Consumption	Not yet tested
Max Power Consumption	Not yet tested
Battery Backup	Not Supplied

Physical Dimensions

Height	80mm
Width	90mm
Depth	35mm
Screw Mount	60mm

Notes

N/A

History

Issue	Date	Changes
1.0	June 2025	Date of first issue.
1.1	July 2025	Minor formatting changes and corrections.

<END>